



The Faculty of Agricultural Sciences of the Georg-August-Universität Göttingen invites applications for the position of the

Full Professor (W3) „Genetics of Crop Plants“

within the framework of a new

“Center for Integrated Breeding”

at the earliest possible date.

The professorship will be part of a unique “Center for Integrated Breeding Research” in plant and animal science which is currently under construction. The center will integrate know-how from natural and social sciences, so that an international trend-setting position in this field can be developed. Leading private plant and animal breeding companies are supporting the development of the center.

Profile in Research and Teaching

The successful candidate will be involved in the evaluation of new developments and methods in the field of plant genetics and their application to crop plants. The methodical aspect should allow especially innovative and promising approaches in research projects, e.g. on functional gene analysis with an emphasis on nutrient efficiency and disease or pest resistance, application of genomics, transcriptomics, proteomics and metabolomics, analysis of gene networks, epigenetics, and control of recombination.

In teaching, the professorship will impart molecular and physiological knowledge of the genetics of crop plants to bachelor students. Within a new MSc degree program on „Integrated Plant and Animal Breeding“ new courses are to be developed, which will also be offered to MSc-students of agricultural sciences. The successful candidate will become part of a Graduate School of Breeding Research, which still is to be established.

Integration of the professorship into key research projects of the Faculty and the University

The development plan of the Faculty of Agricultural Sciences and of the Department of Crop Sciences stipulates the strengthening of breeding research as one major goal.

University/Faculty and private plant and animal breeding companies have agreed on extending their Public Private Partnership activities at the Department of Crop Sciences through the development of the “Center for Integrated Breeding Research” with participation of the professorship for animal breeding and genetics of the Department of Animal Sciences and of the Faculty of Forest Sciences and Forest Ecology. The establishment of three new professorships is possible through a substantial financial contribution of private plant and animal breeding companies. One of those three professorships (“Plant Breeding Methodology”) will be an advanced reoccupation of the present professorship for plant breeding. The new professorship for “Genetics of Crop Plants” will play a central role in the successful implementation of the new center.

The demand for plant and animal products will strongly increase during the next decades. This requires a sustainable increase in agricultural productivity which represents a great challenge for agricultural research. Plant variety development as well as animal production is at the beginning of product chain. Hence, plant and animal breeding are of central importance. The innovative capacity of breeding spans the complete agricultural value added chain, from the characterization and utilization of genetic resources to the provision of sufficient high quality products like food, feed and bio-energy. Sustainability and efficient utilization of resources are increasingly relevant aspects of all breeding developments.

Breeding strategies of the next generation require an efficient combination of classical phenotype-based breeding with high-throughput molecular methods. To take advantage of the quantum leap in molecular technology for breeding research, considerable research is necessary with respect to the advancement of the theoretical basis of quantitative genetics, population genetics, breeding methodology and bioinformatics. Thereby, methodical fundamentals between plant and animal breeding are approaching each other. This methodical connection is supposed to be covered within the new center through a joint professorship for “Bioinformatics”.

At the same time there is an obvious lack of qualified scientists in the area of quantitative breeding methods. Corresponding vacant positions in science and economy are difficult to fill with qualified graduates.

The Georg-August-Universität Göttingen is known worldwide as a place for important breeding innovations in crop plants (i.a. hybrid oilseed rape) and animals (e.g. Göttinger Minipig). Recent technological innovations have caused considerable changes in breeding research. Göttingen has a distinguished reputation in the field of quantitative genetics and genome analysis. This provides best possible conditions for the new “Center for Integrated Breeding Research”. The methodical profile will be enhanced through cooperation with the Faculty of Forest Sciences and Forest Ecology and the Faculty of Biology.

Integration in third-party funded joint research and teaching programs

The participation of the professorship in current joint research projects, e.g. in „Plant 2030“ (BMBF) or „Genetic variation of flowering time genes and application for crop im-

provement“ (SPP der DFG) is planned as well as the initiation of new joint projects in e.g. EU Horizon 2020.

What is offered

The professorship will receive the usual basic personal facilities, which include one research assistant position and 1.5 positions for technical staff, including administration. If there is a well justified demand additional positions may be made available by the Department of Crop Sciences. A basic amount of research money will be allocated to the successful candidate and he will take part in a success-oriented distribution of additional funds. The professorship will be accommodated in suitable places of the Department of Crop Sciences. Experimental facilities are available at the Department. It is planned in medium-term future to accommodate all professorships of the “Center for Integrated Breeding Research” in a new building at the north campus of the University. Additional funds for start-up financing are available.

The successful candidate is expected to have:

- a strong international reputation in the field crop plant genetics
- appropriate teaching experience in German and English language
- a willingness to cooperate in the strategy of international expansion in research and teaching

Contact Person: [Prof. Dr. Elke Pawelzik](#)

We expressly welcome applications from abroad. Under certain circumstances, the position may be filled on a part-time basis. The University of Göttingen strives to increase its proportion of female staff in fields where women are underrepresented and expressly encourages qualified women to apply. Severely disabled persons with the appropriate qualifications will be favoured. Disabled persons with equivalent qualification will be given preference.

Applications including a CV with a representation of the applicant's academic education and career, publications and teaching record should be submitted electronically no later than 19. April 2015. [Application portal](#)